Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (*currently amended*) A method for managing microcode, comprising the steps of:

evaluating a mode command to initiate or change a mode~~, said mode having one or more phases; and~~

~~identifying a phase module sequence corresponding to said one or more phases in response to said evaluated mode command, wherein said phase module sequence includes at least one phase module containing microcode to implement a corresponding phase~~

selecting a combination of functions, each function including microinstructions that, when executed, implement a phase or a sub-phase of said mode; and

delivering said combination to a microcode processor.

2. (*currently amended*) A method according to claim 1, wherein said ~~identifying a phase module sequence~~ selecting step further comprises the step of:

querying a storage medium to select ~~a phase module to match said mode~~ said combination.

3. (*currently amended*) A method according to claim 1, further comprising the step of:

loading said ~~phase module sequence~~ combination into a microcode instruction memory.

4. (*currently amended*) A method according to claim 1, further comprising the step of:

loading a sequence list into a microcode data memory, wherein said sequence list includes a memory address to said ~~phase module sequence~~ combination.

5. (*currently amended*) A method according to claim 1, further comprising the step of:

executing said ~~phase module sequence~~ combination to implement said mode.

6. (*currently amended*) A method according to claim 5, further comprising the steps of:

sending a result from said executing step ~~said phase module sequence~~ to a processor for pixel processing or additional microcode processing.

7. (*currently amended*) A method according to claim 1, further comprising the step of:

sending drawing data to a microcode processor prior to said executing step ~~said phase module sequence~~.

8. (*previously presented*) A method according to claim 1, further comprising the step of:

sending drawing data to a microcode processor to render three dimensional graphics.

9. (*previously presented*) A method according to claim 1, further comprising the step of:

sending drawing data to a microcode processor to render an animation scene.

10. (*previously presented*) A method according to claim 1, further comprising the step of:

sending drawing data to a microcode processor to render a scene for a video game.

11. (*currently amended*) A system for managing microcode, comprising:

a mode detector for evaluating a mode command to initiate or change a mode~~, said mode having one or more phases~~; and

a sequence identifier for ~~identifying a phase module sequence corresponding to said one or more phases, wherein said phase module sequence includes at least one phase module containing microcode to implement a corresponding phase~~ selecting a combination of functions, each function including microinstructions that, when executed, implement a phase or a sub-phase of said mode.

12. (*currently amended*) A system of claim 11, further comprising a code loader for loading said ~~phase module sequence~~ combination into a microcode instruction memory.

13. (*currently amended*) A system of claim 11, further comprising:

a phase executor for commanding a microcode processor to execute said ~~phase module sequence~~ combination.

14. (*currently amended*) A system of claim 11, further comprising:

a drawing data processor for sending drawing data or input for drawing data to a microcode processor in response to said mode command.

15. (*currently amended*) A system of claim 11, further comprising:

a drawing data processor for sending drawing data or input for drawing data to a microcode processor to render a three dimensional model in response to said mode command.

16. (*currently amended*) A system of claim 11, further comprising:

a drawing data processor for sending drawing data or input for drawing data to a microcode processor to render an animation scene in response to said mode command.

17. (*currently amended*) A system of claim 11, further comprising:

a microcode data memory for storing a sequence list specifying a memory address to ~~each phase module within said phase module sequence~~ said combination.

18. (*currently amended*) A computer program product comprising a computer useable medium having computer readable program code means embedded in said medium for causing an application program to execute on a computer used to manage microcode, said computer readable program code means comprising:

[a] first computer readable program code means for causing the computer to evaluate a mode command to initiate or change a mode~~, said mode having one or more phases~~; and

[a] second computer readable program code means for causing the computer to ~~identify a phase module sequence corresponding to said one or more phases, said phase module sequence including at least one phase module that contains microcode to implement a corresponding phase~~ select a combination of functions, each function including microinstructions that, when executed, implement a phase or a sub-phase of said mode.

19. (*currently amended*) A computer program product according to claim 18, wherein said second computer readable program code means loads said ~~phase module sequence~~ combination into a microcode instruction memory.

20. (*currently amended*) A computer program product according to claim 18, further comprising:

[a] third computer readable program code means for causing the computer to command a microcode processor to execute said ~~phase module sequence~~ combination.

21. (*currently amended*) A computer program product according to claim 18, further comprising:

[a] third computer readable program code means for causing the computer to send drawing data or input for drawing data to a microcode processor in response to said mode command.

22. (*currently amended*) A computer program product according to claim 18, further comprising:

[a] third computer readable program code means for causing the computer to send drawing data or input for drawing data to a microcode processor to render three-dimensional graphics in response to said mode command.

23. (*currently amended*) A computer program product according to claim 18, further comprising:

[a] third computer readable program code means for causing the computer to store a sequence list specifying a memory address to ~~each phase module within said phase module sequence~~ said combination.

24. (*new*) A method for managing microcode, comprising the steps of:

accessing a library of functions, each function including microinstructions that, when executed, implement a phase or a sub-phase of a graphic mode;

selecting a combination of functions from said library in response to a mode command to produce a desired mode;

delivering said combination to a processor;

delivering drawing data to said processor; and

executing said combination to process said drawing data and thereby render said desired mode.

25. (*new*) A method according to claim 24, wherein said selecting step comprises:

selecting a merger group from said library, wherein said merger group includes a combination of microinstructions that, when executed, implement a plurality of phases of a graphic mode.

26. (*new*) A method according to claim 24, wherein said selecting step comprises:

preprocessing data for said combination to calculate values used repetitively during said executing step.